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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,376	08/02/2001	Masahiko Sato	450100-03439	4275

20999 7590 05/16/2005

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EXAMINER

SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/920,376		SATO ET AL.	
	Examiner		Art Unit	
	Kevin Schubert		2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-17 have been considered.

Claim Objections

5 Claim 8 is objected to because of the following informalities: the claim does not make sense grammatically. Appropriate correction is required.

Claim Rejections - 35 USC § 102

10 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

 A person shall be entitled to a patent unless –

15 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20 Claims 1-4,8-12, and 16-17 rejected under 35 U.S.C. 102(e) as being anticipated by Cotton, U.S. Patent 6,148,205.

25 As per claims 1 and 9, the applicant describes an authenticating method for radio devices, comprising data communicating means for performing radio communication over a first coverage area and authorizing means for performing authentication of said radio device over a second coverage area, comprising the following limitations which are met by Cotton:

30 a) switching coverage area of two or more of said radio devices from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area (Col 2, lines 28-40; Fig 1);

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b) the two or more radio devices having the second coverage area being brought with in proximity to one another so that the coverage areas overlap (Col 2, lines 28-40; Fig 1);

c) performing mutual authentication between the two or more radio devices by said authenticating means automatically or after confirmation by users of said radio devices (Col 3, lines 39-46; Col 4, lines

5 23-28; Col 5, lines 25-31);

As per claims 2 and 10, the applicant describes the authentication method of claims 1 and 9, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

wherein the step of performing the authentication by said authenticating means is performed in a state where a transmission output of said radio device is reduced to shorten a communication distance of said radio device (Col 3, lines 20-27);

As per claims 3 and 11, the applicant describes the authentication method of claims 2 and 10, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

15 Wherein the transmission output is reduced only in a particular one of said radio devices (Fig 4);

Fig 4 depicts an access device which does not have its transmission output reduced. This means that only the base station has its transmission output reduced as one can see from 222 of Fig 2. One should also note that one embodiment of the invention has the limitation that the access device has its transmission output reduced as illustrated in 504 of Fig 5. Since the base station always has its transmission output reduced, this embodiment of the invention allows for both the base station and the access device having reduced transmission output while the embodiment of Fig 4 allows for only the base station having its transmission output reduced.

As per claims 4 and 12, the applicant describes the authentication method of claims 2 and 10, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

25 Wherein the transmission output is reduced upon turning-on of an authentication button provided on said radio device (Col 3, lines 53-56);

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As per claims 8 and 16, the applicant describes the authentication method of claims 1 and 9, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

Wherein said radio two or more radio performing mutual authentication are portable device (Col 2, lines 32-47);

As per claim 17, the applicant describes an authenticating method for radio devices, comprising the following steps:

a) providing a plurality of mobile radio devices, each of said plurality of mobile radio devices comprising data communication means for performing radio communication and authenticating means for performing authentication of said radio device (Col 2, lines 28-40; Fig 1);

b) performing mutual authentication between two or more radio devices by said authenticating means automatically or after initiation by users of said two or more radio devices when the two or more radio devices come sufficiently closer to each other that coverage areas of radio waves generated by the two or more radio devices overlap (Col 3, lines 39-46; Col 4, lines 23-28; Col 5, lines 25-31);

The applicant should note that 104 and 106 of Fig 1 represent a plurality of mobile radio devices with data communication and authentication means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotton in view of Nealon, U.S. Patent No. 5,463,659.

As per claims 5 and 13, the applicant describes an authenticating method for radio devices according to claims 1 and 9, which are met by Cotton (see above), with the following limitation which is met by Nealon:

5 Wherein the step of performing the authentication by said authenticating means is performed in a state where reception sensitivity of said radio device is reduced to shorten a communication distance of said radio device (Col 8, lines 23-34);

 Cotton describes all the limitations of the independent claims 1 and 9. While Cotton does disclose powering down the RF transmission signal, he does not disclose the use of reducing the
10 reception sensitivity.

 The applicant incorporates the use of reducing the reception sensitivity so that all attention is focused on the authentication method taking place between the two devices. Nealon discloses a registration system similar to both Cotton's and the applicant's in which the devices are powered down upon the initiation of a registration process so that no calls can be placed or received from the station and
15 the only data that is being transmitted and received is the registration data. In this method the reception sensitivity is reduced to the point of being nonexistent except for the registration communication between the devices.

 It would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate the ideas of Nealon with those of Cotton and have the reception powered down as well as the
20 transmission for security purposes and for the purpose of having all attention being focused on the authentication.

As per claims 6 and 14, the applicant describes an authenticating method for radio devices according to claims 5 and 13, which are met by Cotton in view of Nealon (see above), with the following
25 limitation which is also met by Nealon:

 Wherein the reception sensitivity is reduced only in a particular one of said devices (Col 8, lines 23-34);

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Nealon discloses the use of powering down only one device when he discloses only powering down the base station and its receiving and transmitting capabilities (Col 8, lines 23-34).

As per claims 7 and 15, the applicant describes an authenticating method for radio devices according to claims 5 and 13, which are met by Cotton in view of Nealon (see above), with the following limitation which is also met by Cotton:

Wherein the reception sensitivity is reduced upon turning-on of an authentication button provided on said radio device (Col 3, lines 53-56);

The use of an authentication button which sets up the authentication or registration and powers down the device is disclosed by Cotton. The applicant should also note that Nealon discloses an authentication button as well (Col 8, lines 23-26).

Response to Arguments

Applicant's arguments, see Remarks, filed 4/25/05, with respect to the 112 rejection for claims 1-16 have been fully considered and are persuasive in light of the amendment. The 112 rejection of claims 1-16 has been withdrawn.

Applicant's arguments with respect to claim 1 have been fully considered but they are not persuasive. The applicant argues that Cotton does not teach a device having two different coverage areas. The applicant also argues that Cotton does not teach switching from a first to a second coverage area for purposes of authentication. The examiner disagrees. The first coverage area described by Cotton is when the device has a normal RF power level. The second coverage area is when the device has a low RF power level when registration is initiated (Col 2, lines 28-40). This coverage area is smaller than the first coverage area. This is illustrated by the fact that when the base station (102 of Fig 1) goes into authentication mode it is unable to transmit to a device (106 of Fig 1) that it normally would be able to transmit to (Col 2, lines 37-40) because the base station's transmission coverage area has been reduced in the registration mode.

Conclusion


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
10 the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 8:00-5:00.

15 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from
20 either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER